

SUMMARY OF 1992-1997 HARDWOOD REFORESTATION ON DAHOMEY NWR, BOLIVER COUNTY, MS. NOVEMBER 1998.

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During the month of October 1998, an inspection of the 400 acres planted 1992-1997 on the Dahomey NWR, in Boliver County, MS, was conducted. The inspection consisted of performing about 1% cruise, using 0.1 acre circular plots that were distributed randomly across the planted acreage. Number of sample plots per field were weighted according to field acreage. All planted and volunteer seedlings within plot boundaries were tallied.

An estimated 183 ± 41 (Limit of error = 22%) hardwood stems per acre are presently established. Hard-mast species composition is comprised, in part, of 18% oak and less than 1% sweet pecan. Sweetgum has become naturally established on reforested tracts throughout the refuge and accounts for about 44% of total stocking. Other important species that have become naturally established include American elm, boxelder, eastern red cedar, and sugarberry (Table 1).

Pending the third-year post-plant evaluation of field number 2, which was planted in 1997, reforestation efforts on Dahomey NWR been a success (Table 2).

Table 1. Field summary of seedlings per acre (mean \pm stderr) and relative species composition of hardwood reforestation on Dahomey NWR, Bolivar County, MS. November 1998.

Field Number	Year Planted	Acres	Stems per acre	Limit of error (%)	Relative Species Composition
1	1994	76 (6)	226 \pm 80.3	36	American elm 8.6 Boxelder 4.2 E. red cedar 34.4 Nuttall oak 0.7 Persimmon 1.5 Sugarberry 48.4 Water oak 0.7 Willow oak 0.7
2	1997	138 (11)	49 \pm 15	30	Bald cypress 3.7 Cherrybark oak 55.5 Overcup oak 18.5 Persimmon 18.5 Water oak 3.7
3	1993	3 (1)	0	na ¹	na
4	1993	10 (3)	180 \pm 31	17	Boxelder 1.9 Nuttall oak 3.7 Persimmon 3.7 Sugarberry 22.2 Sweetgum 50.0 Water oak 1.9
5	1992	87 (9)	174 \pm 101	58	American elm 13.7 A. sycamore 1.4 Baldcypress 0.7 Boxelder 3.6 Decid. holly 2.2 E. cottonwood 0.7 Green ash 2.8 Nuttall oak 7.2 Persimmon 0.7 Red maple 1.4 Sugarberry 3.7 Sweetgum 52.5 Water oak 6.5 Willow oak 2.9
6	1993	7 (2)	215 \pm 15	7	Cherrybark oak 2.3 Green ash 2.3 Sweet pecan 2.3 Sweetgum 93.0
7	1994	34 (4)	318 \pm 59	19	American elm 1.6 Boxelder 7.1 Nuttall oak 9.4 Persimmon 2.4 Sweetgum 74.8 Wateroak 3.9 Willow oak 0.8
8	1993	30 (1)	na	na	American elm 7.8 Boxelder 5.0 Cherrybark oak 0.7 Green ash 8.5 Sweetgum 70.2 Winged elm 7.8
9	1993	4 (1)	na	na	Green ash 100.0
10	1994	11 (4)	118 \pm 58	49	Cherrybark oak 12.8 Green ash 4.3 Nuttall oak 59.6 Sweetgum 2.1 Water oak 21.2

¹ Insufficient number of plots to calculate statistics

Table 2. Seedlings per acre (mean \pm stderr) and relative species composition of hardwood reforestation on Dahomey NWR, Boliver County, MS. November 1998.

TOTAL Reforestation Dahomey NWR	Acreage	Stems per acre ¹	Relative species composition	
	400	183 \pm 41	American elm	5.9
			American sycamore	0.3
			Baldcypress	0.4
			Boxelder	4.4
			Cherrybark oak	4.9
			Deciduous holly	0.4
			Eastern cottonwood	0.1
			Eastern red cedar	6.3
			Green ash	3.7
			Nuttall oak	7.2
			Overcup oak	1.3
			Persimmon	2.6
			Red maple	0.3
			Sugarberry	11.2
			Sweetgum	44.9
			Sweet pecan	0.1
			Water oak	3.7
			Willow oak	0.8
			Winged elm	1.5

¹Limit of error = 22%

WOOPY SPECIES CODE LIST MWMD

AMERICAN BEECH	AMB	AMB	AMERICAN BEECH
AMERICAN ELM	AEL	AEL	AMERICAN ELM
AMERICAN HOLLY	AMH	AMH	EASTERN HOPHORNBEAM
AMERICAN SYCAMORE	SYC	AMH	AMERICAN HOLLY
AMORPHA (INDIGO BUSH)	IBU	BAC	EASTERN BACCHARIS
BALDCYPRESS	BCY	BAW	BASSWOOD
BASSWOOD	BAW	BBU	BUTTON BUSH
BITTERNUT HICKORY	BNH	BCH	BLACK CHERRY
BLACK CHERRY	BCH	BCY	BALDCYPRESS
BLACK LOCUST	BLL	BGM	BLACK TUPELO
BLACK OAK	BLO	BJO	BLACKJACK OAK
BLACK TUPELO	BGM	BLL	BLACK LOCUST
BLACK WALNUT	BWN	BLO	BLACK OAK
BLACKJACK OAK	BJO	BNH	BITTERNUT HICKORY
BOXELDER	BOX	BOX	BOXELDER
BUR OAK	BUO	BPE	WATER HICKORY, BITTER PECAN
BUTTON BUSH	BBU	BUO	BUR OAK
CAROLINA ASH	CAS	BWN	BLACK WALNUT
CATALPA	CAT	CAS	CAROLINA ASH
CEDAR ELM	CEL	CAT	CATALPA
CHERRYBARK OAK	CBO	CBO	CHERRYBARK OAK
CHINNABERRY	CHI	CEL	CEDAR ELM
COMMON SPICEBUSH	SPB	CHI	CHINNABERRY
DECIDUOUS HOLLY	DEH	DEH	DECIDUOUS HOLLY
DELTA POST OAK	DPO	DLO	DIAMOND-LEAF OAK (LAURAL)
DIAMOND-LEAF OAK (LAURAL)	DLO	DPO	DELTA POST OAK
DRUMMOND RED MAPLE	DRM	DRM	DRUMMOND RED MAPLE
EASTERN BACCHARIS	BAC	ECW	EASTERN COTTONWOOD
EASTERN COTTONWOOD	ECW	ERB	EASTERN REDBUD
EASTERN HOPHORNBEAM	AHB	ERC	EASTERN REDCEDAR
EASTERN REDBUD	ERB	FDW	FLOWERING DOGWOOD
EASTERN REDCEDAR	ERC	FMA	FLORIDA MAPLE
FLORIDA MAPLE	FMA	FMU	FRENCH MULLBERRY
FLOWERING DOGWOOD	FDW	GAS	GREEN ASH
FRENCH MULLBERRY	FMU	HAW	HAWTHORN
GREEN ASH	GAS	HOL	HONEY LOCUST
HAWTHORN	HAW	IBU	AMORPHA (INDIGO BUSH)
HONEY LOCUST	HOL	KCT	KENTUCKY COFFEETREE
KENTUCKY COFFEETREE	KCT	LLP	LOBLOLLY PINE
LOBLOLLY PINE	LLP	MNH	MOCKERNUT HICKORY
MOCKERNUT HICKORY	MNH	NRO	NORTHERN RED OAK
NORTHERN RED OAK	NRO	NUO	NUTTALL OAK
NUTTALL OAK	NUO	OCO	OVERCUP OAK
OSAGE ORANGE	OOR	OOR	OSAGE ORANGE
OVERCUP OAK	OCO	PAP	PAWPAW
PAULOWNIA	PAU	PAU	PAULOWNIA
PAWPAW	PAP	PBE	PONDBERRY
PERSIMMON	PER	PCY	PONDCEYPRRESS
PIGNET HICKORY	PNH	PER	PERSIMMON
PONDBERRY	PBE	PNH	PIGNET HICKORY
PONDCEYPRRESS	PCY	POO	POST OAK
POST OAK	POO	POP	YELLOW POPULAR
RED MAPLE	RMU	RBI	RIVER BIRCH
RED MULLBERRY	RMU	RDW	ROUGH-LEAF DOGWOOD
RIVER BIRCH	RBI	RMU	RED MULLBERRY
ROUGH-LEAF DOGWOOD	RDW	RMU	RED MAPLE
SASSAFRAS	SAS	SAS	SASSAFRAS
SCARLET OAK	STO	SCO	SWAMP WHITE OAK
SHAGBARK HICKORY	SGH	SCW	SWAMP COTTONWOOD
SHELLBARK HICKORY	SLH	SDW	SWAMP DOGWOOD
SHOMARD OAK	SHO	SGH	SHAGBARK HICKORY
SHORTLEAF PINE	SLP	SHO	SHOMARD OAK
SILVER MAPLE	SMA	SLH	SHELLBARK HICKORY
SOUTHERN RED OAK	SRO	SLP	SHORTLEAF PINE
SUGARBERRY	SUB	SMA	SILVER MAPLE
SUMAC	SUM	SPB	COMMON SPICEBUSH
SWAMP CHESTNUT OAK	SWO	SPE	SWEET PECAN
SWAMP COTTONWOOD	SCW	SRO	SOUTHERN RED OAK
SWAMP DOGWOOD	SDW	STO	SCARLET OAK
SWAMP PRIVET	SWP	SUB	SUGARBERRY
SWAMP WHITE OAK	SCO	SUM	SUMAC
SWEET GUM	SWE	SWE	SWEET GUM
SWEET PECAN	SPE	SWL	SWEETLEAF
SWEETLEAF	SWL	SWO	SWAMP CHESTNUT OAK
WATER-EM (PLANERTREE)	WAE	SWP	SWAMP PRIVET
WATER HICKORY, BITTER PECAN	BPE	SYC	AMERICAN SYCAMORE
WATER OAK	WAO	WAE	WATER-EM (PLANERTREE)
WATER TUPELO	WTU	WAL	WATERLOCUST (SMALLER FRUIT)
WATERLOCUST (SMALLER FRUIT)	WAL	WAO	WATER OAK
WHITE ASH	WAS	WAS	WHITE ASH
WHITE OAK	WHO	WEL	WINGED ELM
WILLOW	WIL	WHO	WHITE OAK
WILLOW OAK	WIO	WIL	WILLOW
WINGED ELM	WEL	WIO	WILLOW OAK
YELLOW POPULAR	POP	WTU	WATER TUPELO